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| 09/100,516      | 06/19/1998  | LARRY V. KASTER JR.  | 3038240/5847        | 8642             |

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THE FINANCIAL CENTER  
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SUITE 2500  
DES MOINES, IA 50309-3993

EXAMINER

KRUSE, DAVID H

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1638

24

DATE MAILED: 09/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicati n No.

09/100,516

Applicant(s)

KAster ET AL.

Examin r

David H Kruse

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2003 and 27 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-11 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-11 and 21-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This Office action is in response to the reply filed on 2 January 2003 and 27 May 2003.
2. Those rejections not specifically addressed in this Office action are withdrawn in view of Applicant's amendments and/or arguments filed 2 January 2003.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### Claim Rejections - 35 USC § 112

4. Claims 1-4, 6-11 and 21-23 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

At claim 1, line 7, the phrase "the V5 stage" appears to be a relative limitation that only relates to maize, which the instant claims does not comprise a limitation by which the claimed method is only directed to a method of producing maize progeny, hence the metes and bounds of the claimed invention are unclear.

At claim 1, line 16, the limitation "preferentially herbicide resistant plant progeny" is indefinite because it is unclear what the intended end product of the claimed method is, hence the metes and bounds of the invention are unclear. Claims 2-4, 6-11 and 21-23 are also indefinite because they do not obviate the indefiniteness of claim 1.

Claim 1 is rejected under 35 U.S.C. § 112, second paragraph, as indefinite because it recites the limitation "the Glyphosate resistance gene" in line 13. There is insufficient antecedent basis for this limitation within the claim.

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5. Claims 1, 3, 4, 6-11, 21 and 22 remain rejected under 35 U.S.C. § 112, first paragraph, because the specification, while being enabling for a method of producing a transgenic maize plant comprising applying glyphosate to a population of transgenic plants wherein said glyphosate inhibits pollen lacking a transgene that confers glyphosate resistance on said transgenic plant, does not reasonably provide enablement for a method of producing any transgenic plant comprising any transgene conferring resistance to any herbicide upon said transgenic plant. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. This rejection is repeated for the reason of record as set forth in the last Office action mailed 28 August 2002. Applicant's arguments filed 2 January 2003 have been fully considered but they are not persuasive.

Applicant argues that undue experimentation is not required because resistances to other herbicides were known in the art and that one would only be required to practice the claimed method. Applicant also states that they are in possession of evidence that resistance to the imidazolinone herbicide 'Persuit' working in a similar manner (paragraph spanning pages 2-3 of the Remarks). The Examiner responds that the possession of evidence not presented in the instant case is irrelevant to the instant rejection. The issue of undue trial and error experimentation remains as directed to identifying resistant plants, especially heterozygous resistance, and herbicides that would be effective in the claimed method in general. Applicant provides no guidance

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that herbicides, in general, can be used as gametocides with respect to plants that are heterozygous for an herbicide resistance gene.

***Claim Rejections - 35 USC § 103***

6. Claims 1-4, 6-11 and 21-23 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Spencer *et al* (U.S. Patent 6,040,497) in view of Dhingra *et al* (U.S. Patent 4,735,649). This rejection is repeated for the reason of record as set forth in the last Office action mailed 28 August 2002. Applicant's arguments filed 2 January 2003 have been fully considered but they are not persuasive.

Applicant argues that Spencer does not teach nor suggest spraying the plant, which is heterozygous, parent plant at a specific level or stage of growth so that pollen produced is only (R). Applicant also argues that Spencer is spraying the progeny (page 4, 2<sup>nd</sup> paragraph of the Remarks). This argument is not found to be persuasive because Spencer teaches spraying maize plants transformed with a mutant EPSPS gene at between stage V6 and V8, which meets the limitation of Applicant's claim 1 of "at least after the V5 stage", Spencer is not spraying to select for non-transformed progeny plants (Column 51, 1<sup>st</sup> paragraph).

Applicant argues that the prior art simply identifies that the progeny will segregate for resistance and susceptibility to the herbicide (page 4, 4<sup>th</sup> paragraph of the Remarks). This argument is not found to be persuasive because in example outlined above, Spencer is not identifying progeny.

Applicant argues that the concept that progeny have no susceptibility to the herbicide because the parent pollen was sprayed at the late vegetative stage is not

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taught nor suggested by the prior art. This argument is not found to be persuasive because, even though Spencer does not recognize the inherent property of the taught method, Spencer teaches the claimed method steps and thus renders the claimed method obvious. See *Integra LifeSciences I Ltd. V. Merck KGaA* 50 USPQ2d 1846, 1850 (DC SCalif 1999), which teaches that where the prior art teaches all of the required steps to practice the claimed method and no additional manipulation is required to produce the claimed result, then the prior art anticipates the claimed method. See also, *ex parte Novitski*, 26 USPQ2d 1389 (Bd. Pat. App. & Inter. 1993) The Board rejected a claim directed to a method for protecting a plant from plant pathogenic nematodes by inoculating the plant with a nematode inhibiting strain of *P. cepacia*. A U.S. patent to Dart disclosed inoculation using *P. cepacia* type Wisconsin 526 bacteria for protecting the plant from fungal disease. Dart was silent as to nematode inhibition but the Board concluded that nematode inhibition was an inherent property of the bacteria. The Board noted that applicant had stated in the specification that Wisconsin 526 possesses an 18% nematode inhibition rating (see also *Integra LifeSciences I Ltd. V. Merck KGaA* 50 USPQ2d 1846 at 1851 (DC SCalif 1999)).

### **Conclusion**

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR § 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. No claims are allowed.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Kruse, Ph.D. whose telephone number is (703) 306-4539. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Amy Nelson can be reached at (703) 306-3218. The fax telephone number for this Group is (703) 872-9306 Before Final or (703) 872-9307 After Final.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (703) 308-0196.

A handwritten signature in black ink, appearing to read "Amy Nelson", is positioned above the typed name and title of the supervisor.

David H. Kruse, Ph.D.  
26 August 2003

AMY J. NELSON, PH.D  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600